

Powers of Ten

Billions

$$10^9 = 1,000,000,000$$

$$10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 = 1,000,000,000$$

Millions

$$10^6 = 1,000,000$$

$$10 \times 10 \times 10 \times 10 \times 10 \times 10 = 1,000,000$$

Hundred thousands

$$10^5 = 100,000$$

$$10 \times 10 \times 10 \times 10 \times 10 = 100,000$$

Ten thousands

$$10^4 = 10,000$$

$$10 \times 10 \times 10 \times 10 = 10,000$$

Thousands

$$10^3 = 1,000$$

$$10 \times 10 \times 10 = 1,000$$

Hundreds

$$10^2 = 100$$

$$10 \times 10 = 100$$

Tens

$$10^1 = 10$$

Ones

$$10^0 = 1$$

Tenths

$$10^{-1} = 1/10$$

$$1/10 = 0.1$$

Hundredths $10^{-2} = 1/10^2$ or $1/100$

$$1/100 = 0.01$$

Thousandths $10^{-3} = 1/10^3$ or $1/1000$

$$1/1000 = 0.001$$

Ten Thousandths $10^{-4} = 1/10^4$ or $1/10,000$

$$1/10,000 = 0.0001$$

Hundred Thousandths $10^{-5} = 1/10^5$ or $1/100,000$

$$1/100,000 = 0.00001$$

Millionths $10^{-6} = 1/10^6$ or $1/1,000,000$

$$1/1,000,000 = 0.000001$$

Billionths

$$10^{-9} = 1/10^9 \text{ or } 1/1,000,000,000$$

$$1/1,000,000,000 = 0.000000001$$